patient, "shelling out" the head over the perineum just prior to tying the infant's cord. The book is full of suggestions to the general practitioner which are probably of marked clinical value, but which often had better be taken cum grano salis.

While the book is not one to be recommended to students it can always be read by the practitioner with profit and often with amusement.

A. B. S.

Radiant Light and Heat and Convective Heat. By W. B. Snow. Scientific Authors' Publishing Co., New York.

Dr. Snow states in his preface:

"It has been the writer's purpose in the preparation of this little volume, as far as possible, to make it a practical aid to beginners in an important department of physical therapeutics, in which, if he has succeeded, he will be rewarded for his efforts."

Dr. Snow has undoubtedly succeeded in his purpose; his book is concise, complete and not too technical and, as he states in the preface, suitable for beginners.

His clinical reports are not highly exaggerated, as we often find in books of this character, and the small details of the methods of treatment are particularly well given.

In short, the work is a good epitome of the subject and well worth the perusal of any one interested in this line of work.

D. F.

The Principles of Pathology. By J. George Adami, M. A., M. D., LL. D., F. R. S., Professor of Pathology in McGill University and Pathologist to the Royal Victoria Hospital, Montreal; Late Fellow of Jesus College, Cambridge, England. Volume I: General Pathology. Illustrated. Lea & Febiger, Philadelphia and New York, 1908.

From the publication of Virchow's great work on Cellular Pathology until very recently morphological studies have dominated pathological investigation almost to the exclusion of all other methods. For years pathologists concerned themselves with the discovery of new lesions, and in giving precision to the morphology of old ones; in gathering statistics, exploiting organs of exaggerated size, and in general as Prudden has remarked, celebrating the monstrous and the strange. Fruitful as have been many of these researches the investigator of to-day, however, counts them "as but glimpses on the threshhold of a domain in which his problems demand a recognition of the dominion in his own fields of universal physical and chemical laws, of the doctrine of evolution, and of the potency in single cells and in cell communities of hereditary traits and tendencies." Thus, in the added light of biology, physiology, chemistry, physics, anatomy, and of all the sciences ancillary to medicine the study of morbid processes has assumed to-day a significance impossible with the older methods of approach.

While this broader conception is manifest in much of the recent literature relating to pathology, textbooks on the subject have almost invariably disregarded it, so much so that they are little more than records of more or less crude morphological observations. The time has passed, however, when morbid anatomy and morbid histology may be regarded as the sum and substance of pathological teaching, and when to name the tools is all that is to be demanded of the student. Although a knowledge of structural alterations is essential to a clear comprehension of some of the effects of altered function, in the future greater emphasis will have to be laid on the causes of disease and mechanism by which structural and functional changes are produced as well as upon the biological and physiological significance of the cellular reactions, if we are to impart to the student a knowledge which he can intelligently apply to his later clinical experience.

Noteworthy among those who have taken this position is Professor Adami, the author of the present System of Pathology. In that masterly article on inflammation, which appeared several years ago in Allbutt's System of Medicine, he clearly indicated one of the viewpoints at least from which pathology may and should be presented. With the same philosophical conception he has attempted to present in this first volume the broad principles which underlie not only pathology but physiology as well. It is chiefly in this respect that the present volume differs from its numerous predecessors; instead of a mere account of various lesions, especially from the morphological side, Professor Adami gives in an orderly manner an analysis of the phenomena of disease.

Since the author, like the great master, Virchow, was forced to recognize the cell and the changes undergone by it as the basis of all pathological study he begins his book with a description of the cell from histological, physiological and chemical standpoints. This phase of the subject is very properly dwelt upon at considerable length while the biophoric theory receives adequate recognition in the discussion of inheritance in so far as it bears on pathology. The second section of the work contains a satisfactory, although in some aspects a rather summary account of the cause of disease, while the third and last section deals with Morbid and Reactive Processes, such as Inflammation, Immunization and Immunity, Regeneration, Neoplasms and Regressive Tissue Changes.

In a medical journal of this character it seems scarcely necessary to analyze the work in greater detail. Although some of the views advanced by the author are at least debatable, we have no hesitancy in expressing the opinion that this is the most logical presentation of general pathology which has ever appeared in any language. We suspect, however, that the treatment is somewhat too comprehensive for the average medical student of the present day; but as a work of reference it will unquestionably render signal service.

A. J. L.

The Principles of Bacteriology: A Practical Manual for Students and Physicians. By A. C. Abbott, M. D., Professor of Hygiene and Bacteriology and Director of the laboratory of Hygiene, University of Pennsylvania. Eighth edition. Thoroughly revised.

It has been some little time since the issue of the last edition of this always excellent book. There have been many new steps taken along this part of medicine. The author has taken up the most important and tried of these new advances, and brought his book up to date. He has also eliminated some of that which is of less importance. In this he is right, as this is one of the most important branches of preventive medicine as well as the one most subject to changes due to research and advancement. In other words, he aims straight at the useful and eliminates the others. The book is beautifully arranged, printed and bound.

H. R. O.